



Filed Via Express Mail

Rec. No.: \_\_\_\_\_

On: \_\_\_\_\_

By: \_\_\_\_\_

LINDA E. HASTINGS

Any fee due as a result of this paper, not covered by an enclosed check, may be charged on Deposit Acct. No. 08-1634.

Attorney Docket No.: FUJH 13.010A

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor : SHINICHIROU HARASAWA, et al  
Serial No. : 09/084,787  
Filed : May 21, 1998  
Title : **INPUT MONITORING SYSTEM FOR  
OPTICAL AMPLIFYING REPEATER**  
Examiner : N. Moskowitz  
Group Art Unit : 3662

Assistant Commissioner for Patents  
Washington, D.C. 20231

**DECLARATION UNDER 37 C.F.R. 1.132**

S I R :

I, Masuo SUYAMA, hereby declare as

follows:

1. I received Bachelor of Engineering and  
Master of Engineering in Applied physics  
from University of Tokyo in 1980 and 1982.



I am presently employed at FUJITSU LIMITED as  
Manager .

3. A list of my publications is attached hereto as Exhibit A.
4. I have been involved in research in the field of Optical Communication  
for the past 19 years.
5. I have read the specification and claims of the present application, the Office  
Action mailed on June 23, 2000, and the references cited therein.
6. The placing of an optical filter upstream of an optical amplifier, as disclosed in  
Heidemann, (U.S. Patent No. 5,335,109), in Fig. 15 of the above-mentioned application  
would result in a filter being placed on the optical fiber transmission path 1 in Fig. 15.
7. There is no teaching in Heidemann to place the optical fiber between the coupler  
10 and photo diode 11 in Fig. 15, the coupler 10 being upstream of the optical fiber  
amplifier 2 in Fig. 15, as claimed in claims 15-19 of the above-mentioned application.
8. The only optical coupler disclosed, taught, or suggested anywhere in Heidemann  
is the pump coupler 5 which is downstream of the erbium-doped fiber 3.

9. Heidemann is directed towards greater control over the level of an electrical output signal produced by an optical to electrical transducer.
10. The use of optical filters in Heidemann upstream and downstream from the optical amplifier aid in achieving the greater control over electrical output since they absorb extraneous pump light from a pump source 4 that controls the gain of the erbium-doped optical fiber amplifier 3.
11. In contrast, the optical filter claimed in the above-mentioned application is not directed towards gaining greater control over the optical and hence electrical output, but rather the optical filter claimed in the above-mentioned application is directed towards ascertaining the level of the optical input.
12. Aida et al. is not directed towards determining the level of the optical input, as is the invention claimed herein.



I further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

June 5, 2001  
DATE

Mahno Sanyal  
SIGNATURE



**Exhibit A**

- (1) **Title:** Transoceanic WDM system with more than 100 Gb/s capacity  
**Author(s):** Suyama, M.; Iwata, H.; Shimojoh, N.; Harasawa, S.; Naito, T.  
**Author Affiliation:** Fujitsu Labs. Ltd., Kawasaki, Japan  
**Journal:** Optical Fiber Technology: Materials, Devices and Systems  
vol.3, no.4 p.309-19  
**Publisher:** Academic Press,  
**Publication Date:** Oct. 1997 **Country of Publication:** USA
- (2) **Title:** Optical fiber submarine network system  
**Author(s):** Suyama, M.; Harasawa, S.; Amaki, K.  
**Author Affiliation:** Fujitsu Labs. Ltd., Japan  
**Journal:** Fujitsu vol.48, no.5 p.391-5  
**Publisher:** Fujitsu,  
**Publication Date:** 1997 **Country of Publication:** Japan
- (3) **Title:** Improvement of WDM transmission performance by non-soliton RZ coding-a demonstration using 5 Gb/s 8-channel 4500 km straight line test bed  
**Author(s):** Suyama, M.; Iwata, H.; Harasawa, S.; Naito, T.  
**Author Affiliation:** Fujitsu Ltd., Kawasaki, Japan  
**Conference Title:** OFC '96. Optical Fiber Communication. Vol.2. 1996 Technical Digest Series. Postconference Edition (IEEE Cat. No.CH35901) p.431-4  
**Publisher:** Opt. Soc. America, Washington, DC, USA  
**Publication Date:** 1996 **Country of Publication:** USA ix+476 pp.
- (4) **Title:** Suppression of gain bandwidth narrowing in a 4 channel WDM system using unsaturated EDFAs and a 1.53  $\mu$ m ASE rejection filter  
**Author(s):** Suyama, M.; Terahara, T.; Kinoshita, S.; Chikama, T.; Takahashi, M.  
**Author Affiliation:** Optoelectron. Syst. Lab., Fujitsu Labs. Ltd., Kawasaki, Japan  
**Journal:** IEICE Transactions on Communications vol.E77-B, no.4 p. 449-53  
**Publication Date:** April 1994 **Country of Publication:** Japan



(5) **Title:** Directional transmission scheme using intensity modulation of 1.48  $\mu$ m pump laser diode for erbium-doped fibre amplifier

**Author(s):** Suyama, M.; Watanabe, S.; Yokota, I.; Kuwahara, H.

**Author Affiliation:** Fujitsu Labs. Ltd., Kawasaki, Japan **Journal:**  
Electronics Letters vol.27, no.1 p.89-91

**Publication Date:** 3 Jan. 1991 **Country of Publication:** UK

(6) **Title:** High Output Power and Low Noise Optical Amplifier Using Highly Efficient Er-doped Fiber

**Author(s):** Suyama, M.; Izumi, Y.; Kuwahara, H.; Inagawa, S.; Tagawa, K.;  
Takeda, K.; Okamura, K.

**Journal:** IEICE Technical Report Vol. 91, No. 282(OCS91 32-37) page. 7-12 1999